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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-------------|----------------------|---------------------|------------------|
| 09/750,246 | 12/29/2000 | Dong Yeung Kwak | 8733.371.00 | 7372 |
| 30827 | 7590 | 03/05/2004 | EXAMINER | |
| MCKENNA LONG & ALDRIDGE LLP | | | TON, MINH TOAN T | |
| 1900 K STREET, NW | | | ART UNIT | |
| WASHINGTON, DC 20006 | | | PAPER NUMBER | |
| | | | 2871 | |

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,246

Applicant(s)

KWAK ET AL.

Examiner

Toan Ton

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Claim Rejections - 35 USC § 103

1. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art (APA hereinafter, Figures 1-6) in view of Nakahara et al (US 5982470).

APA discloses all except for gate dummy patterns and data dummy patterns.

Nakahara discloses the use dummy patterns within the same context as Applicant's claimed invention yield advantages such as uniform thickness of the seal on four sides, a difference in brightness between a central portion and portion in a vicinity of the seal in the display region can be eliminated. Nakahara shows the dummy patterns having portions formed substantially with the same structure as the bus lines. Therefore, it would have been obvious to one of ordinary skill in the art to employ such dummy patterns for achieving advantages such as uniform thickness of the seal on four sides, a difference in brightness between a central portion and portion in a vicinity of the seal in the display region can be eliminated. Further, it would have been *at least* obvious to one of ordinary skill in the art to manufacture employing same steps such as forming the dummy patterns having the same structure (i.e., same layer) as the bus lines/links for achieving several common reasons in the art such as cost-reduction(effective), ease of manufacturing.

Per claims 2-3, 6-7, 10, 11, 14-15, 18-19 and 22-23, it would have been *at least* obvious to one of ordinary skill in the art to manufacture employing same steps or/and same materials (i.e., simultaneously-formed) for achieving several common reasons in the art such as cost-reduction(effective).

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2. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art (APA hereinafter, Figures 1-6) in view of Hayakawa et al (US 6172732).

APA discloses all except for gate dummy patterns and data dummy patterns.

Hayakawa discloses the use dummy patterns within the same context as Applicant's claimed invention yield advantages such as an unevenness of liquid crystal cell gap is improved. Hayakawa shows the dummy patterns having portions formed substantially with the same structure as the bus lines. Therefore, it would have been obvious to one of ordinary skill in the art to employ such dummy patterns for achieving advantages such as an unevenness of liquid crystal cell gap is improved. Further, it would have been *at least* obvious to one of ordinary skill in the art to manufacture employing same steps such as forming the dummy patterns having the same structure (i.e., same layer) as the bus lines/links for achieving several common reasons in the art such as cost-reduction(effective), ease of manufacturing.

Per claims 2-3, 6-7, 10, 11, 14-15, 18-19 and 22-23, see detailed explanations above.

Response to Arguments

3. Applicant's arguments filed 12/03/03 have been fully considered but they are not persuasive.

Applicant argues that neither Nakahara nor Hayakawa discuss the dummy patterns formed simultaneously/with the same structure with any one of the gate links and data links.

Nakahara discloses the use dummy patterns within the same context as Applicant's claimed invention yield advantages such as uniform thickness of the seal on four sides, a difference in brightness between a central portion and portion in a vicinity of the seal in the

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display region can be eliminated. Nakahara shows the dummy patterns having portions formed substantially with the same structure as the bus lines. Therefore, it would have been obvious to one of ordinary skill in the art to employ such dummy patterns for achieving advantages such as uniform thickness of the seal on four sides, a difference in brightness between a central portion and portion in a vicinity of the seal in the display region can be eliminated. Further, (1) it would have been *at least* obvious to one of ordinary skill in the art to manufacture employing same steps such as forming the dummy patterns having the same structure (i.e., same layer) as the bus lines/links for achieving several common reasons in the art such as cost-reduction(effective), ease of manufacturing; (2) it would have been *at least* obvious to one of ordinary skill in the art to manufacture employing same steps or/and same materials (i.e., simultaneously-formed) for achieving several common reasons in the art such as cost-reduction(effective).

Hayakawa discloses the use dummy patterns within the same context as Applicant's claimed invention yield advantages such as an unevenness of liquid crystal cell gap is improved. Hayakawa shows the dummy patterns having portions formed substantially with the same structure as the bus lines. Therefore, it would have been obvious to one of ordinary skill in the art to employ such dummy patterns for achieving advantages such as an unevenness of liquid crystal cell gap is improved. Further, (1) it would have been *at least* obvious to one of ordinary skill in the art to manufacture employing same steps such as forming the dummy patterns having the same structure (i.e., same layer) as the bus lines/links for achieving several common reasons in the art such as cost-reduction(effective), ease of manufacturing; (2) it would have been *at least* obvious to one of ordinary skill in the art to manufacture employing same steps or/and same

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materials (i.e., simultaneously-formed) for achieving several common reasons in the art such as cost-reduction(effective).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 1, 2004


TOANTON
PRIMARY EXAMINER